

ABSTRACT OF THE DISCLOSURE

Method and system for providing security mobility between two cellular systems.

One or more ciphering keys are generated for a second cellular system by an interoperability authentication center at a first cellular system and by a mobile device separately. Traffic between the mobile device and the first cellular system is encrypted using one or more first ciphering keys for the first cellular system. A handover of the traffic of the mobile device from the first cellular system to the second cellular system is requested by the mobile device. After approval of handoff and before handoff, the one or more second ciphering keys are sent from the first cellular system to the second cellular system. The traffic is handed off by the mobile device from the first cellular system to the second cellular system. The traffic between the mobile device and the second cellular system is encrypted using the one or more second ciphering keys. The ciphering of the traffic is maintained during handoff.